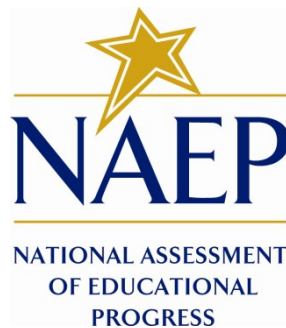


*NATIONAL CENTER FOR EDUCATION STATISTICS
NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS*

National Assessment of Educational Progress (NAEP) 2027

*Supporting Statement
Part B*

OMB #1850-0928 v.39



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PART B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

B.1. Potential Respondent Universe and Sample Design

The possible universe of student respondents for NAEP 2027 is estimated to be 12,000 students at grade 8 attending the approximately 321 public and private schools in a variety of states and the District of Columbia, and may include Bureau of Indian Education Schools.

Respondents are selected according to student sampling procedures. Below are some possible exclusions:

- The student is identified as an English learner (EL), but is prevented from participation in NAEP, even with accommodations allowed in NAEP.
- The student is identified as having a disability (SD) which prevents participation in NAEP, even with accommodations as allowed in NAEP, and has an Individualized Education Plan (IEP) or equivalent classification, such as a Section 504 plan.

Additional information regarding the classification of students is provided in section B.1.a.

B.1.a. Sampling Procedures

To assess a representative sample of students, the sampling process begins by identifying a sample of schools with student populations that reflect the varying demographics of a specific jurisdiction, be it the nation, a state, or a district. Within each selected school, students are chosen at random to participate, and each has the same chance of being chosen, regardless of socioeconomic status, disability, status as an EL, or any other factor. Selecting schools that are representative helps ensure that the student sample is representative.

The following are characteristic features of NAEP sample designs:

- For state-level assessments, approximately equal sample sizes (2,000–3,000 assessed students) from each participating state's¹ public schools
- For district-level assessments, sample sizes of approximately 1,000–2,000 from each participating district's public schools
- Sample sizes of approximately 6,000–20,000 for national-only operational subjects, depending on the size of the item pool²
- Samples sizes of approximately 3,000–12,000 for pilot assessments, depending on the size of the item pool³
- In each school, some students to be assessed in each subject

Additional information about the sampling procedures used in NAEP can be found in the technical documentation at http://nces.ed.gov/nationsreportcard/tdw/sample_design/. Note: while the latest documentation for main NAEP that has been published (as of the drafting of this document) is from 2022, the procedures have essentially remained the same. A summary of the sampling procedures is included on the following page. Additional details (taken from the main NAEP 2022 procedures on the technical documentation website) can be found in Appendix G (NAEP 2022 Sample Design).

As in the past, NAEP samples are based on multistage designs. For the national samples, a two-or three-stage design is used. If a three-stage design is used, the first stage is the selection of primary sampling units

¹ Participating states vary depending on the subject and grade assessed, but may include the 50 states, the District of Columbia, the DoDEA, Bureau of Indian Education Schools, and (for mathematics assessments only) Puerto Rico.

² NAEP Item Response Theory (IRT) scaling requires a minimum sample size of 1,500-2,000 students per item in order to estimate stable item parameters. Therefore, national assessments with larger item pools have larger samples.

³ NAEP IRT scaling is conducted for most pilot assessments, requiring a minimum of 1,500-2,000 students per item in order to estimate stable item parameters. Therefore, pilot assessments with larger item pools have larger samples.

(PSUs), which are individual counties or groups of contiguous counties. The next stage is the selection of schools (within PSUs, when a three-stage design is used), and the final stage is the selection of students within schools. The national samples have sufficient schools and students to yield results for public schools, private schools, charter schools, each of the four Census Regions of the country, as well as sex, race/ethnicity, and degree of urbanization of school location.

The following steps are used to select a sample of public schools and students in a year when NAEP reports state-level results. Private schools are not included in a state-level sample, which focuses solely on public schools.

1. Generate a sampling frame.

For sampling frames, NAEP uses the most current versions of the NCES Common Core of Data (CCD; public schools) and Private School Universe Survey (PSS; private schools) files. In addition, to address the fact that the CCD file does not necessarily include the most recent changes to schools by the time of the assessment, NAEP also conducts a survey of NAEP State Coordinators to check for additional new schools in a sample of public-school districts. A similar process on the PSS is done for Catholic schools in a sample of dioceses.

2. Classify schools into groups.

Using the list, schools are classified into groups, first by type of location and then by the race/ethnicity classification within those locations.

3. Within each group, order schools by a measure related to student achievement.

Within each group, schools are sorted by student achievement to ensure that schools with varying levels of student achievement are represented in the NAEP sample. This is done using school-level results on state achievement tests. In a few cases where recent achievement data are not available, schools are sorted by the median household income for the area where the school is located.

4. Assign a measure of size to all schools.

All schools on the list are assigned a measure of size. A school's measure of size is based on the size of its enrollment in relation to the size of the state's student population at the selected grade level. Larger schools have a larger measure of size as they represent a larger proportion of the state's student population. This step ensures that students from schools of different sizes are appropriately represented in the sample.

5. Select the school sample.

After schools are assigned a measure of size and grouped on an ordered list based on the characteristics that are referred to in previous steps, the sample is selected using stratified systematic sampling with probability proportional to the measure of size using a sampling interval. This procedure ensures that each school has the required selection probability. By proceeding systematically throughout the entire list, schools of different sizes and varying demographics are selected, and a representative sample of students will be chosen for the assessment. Additional details regarding the selection of the school sample are included in the technical documentation ([2022 Sample Design](#)).

6. **Confirm school eligibility.**

The list of schools selected to participate is sent to each state to verify that the school is eligible for participation. Some factors that would make a school ineligible include if the school has closed, is a virtual school, or if the grade span has changed so that a grade level or age assessed by NAEP is no longer in the school. Eligibility counts are included in the technical documentation ([NAEP Assessment Sample Design](#)). Information on response rates can be found in section B.3.

7. **Select students to participate in NAEP.**

School principals are notified that their schools have been chosen to participate in NAEP. Within each sampled school, a systematic sample of students is selected with equal probability from a complete list of students at the grade to be assessed.

NAEP alternates between national-level administration years and state-level administration years that include one or more assessments that support national, state-by-state, and certain urban districts' reporting. For assessments where results are reported at the national, state, and urban district (TUDA) levels, a single sample of public-school students is selected and used for reporting at each level. That is, a student who is sampled from a school located in a TUDA district contributes to the estimates at each of the district, state, and national levels. Similarly, a student who is sampled from a school in a particular state contributes to the estimates both for that state and the nation. For assessments where results are reported at the national level, but not for states and districts, schools are sampled from across the United States, without any oversampling of particular states or districts.

The process for private school selection is similar to the public-school selection process but depends on the U.S. Department of Education's private education system databases to create the initial list of all known private schools. Private schools are sampled to be representative of private schools nationwide. The results for private schools are not included in state-level results, which are solely focused on public schools.

For 2027, results will be analyzed but not reported because 2027 is a pilot assessment. A nationally representative sample will be selected in three stages: PSUs, schools, and students.

NAEP yearly sample design plans are not available until the spring of the year preceding the assessments. The purpose of the sample design memorandum is to detail the specific sampling procedures used for the 2027 assessment. The 2026 Sampling Design Memo included in this package (Appendix C) will be updated in the Amendment (July 2026) to reflect the 2027 Sampling Design.

Additional information about the sampling procedures used in operational NAEP can be found in the technical documentation at http://nces.ed.gov/nationsreportcard/tdw/sample_design/.

B.1.b. Weighting Procedures

For operational NAEP assessments, since each selected school that participates in the assessment effort and each student assessed constitutes only a portion of the full population of interest, weights are applied to both schools and students. The weights permit valid inferences to be drawn from the student samples about the respective populations from which they were drawn and, most importantly, ensure that the results of the assessments are fully representative of the target populations.

However, because 2027 is a pilot assessment, the results will not be reported—therefore, final student weights will not be calculated. Preliminary student weights will be computed so that the required analyses can be conducted. The preliminary weights will reflect the actual school sampling, and, for most students, the actual student sampling. For a few schools, it may be necessary to use anticipated student sampling rates. There will be no adjustments for school or student nonresponse.

Estimates of the sampling variance of statistics derived through the assessment effort are developed through a

replication method known as “jackknife.” This process of replication involves the repeated selection of portions of the sample (replicates). A separate set of weights is produced for each replicate, using the same weighting procedures as for the full sample. The replicate weights, in turn, are used to produce estimates for each replicate (replicate estimates). The variability among the calculated replicate estimates is then used to obtain the variance of the full-sample estimate. Jackknife replicate weights will be prepared if needed to support the required analyses.

B.2. Procedures for Collection of Information

B.2.a. Recruitment of Schools

Once the sample of schools is selected for the 2027 NAEP administration, the NAEP State Coordinator and NAEP Field Staff typically follow a standard set of procedures for securing the participation of public and private schools. The 2027 assessment procedures are listed below:

- Send a notification to the district superintendents of which and how many schools were selected for NAEP from their district (see Appendix D-1 for the letters and Appendix D-3 for the included information)
- Send a notification to complete the School Technology Survey (see Appendix D-5)
- Send a notification to school or district NAEP Assessment Application installer who will handle coordination with NAEP, install and remove the application, and provide access to technology support with instructions (see Appendix D-8)
- Send a notification of each school’s selection for NAEP to the principal or other administrative official, along with an assessment resources containing introductory information and materials including instructions for assigning a school coordinator (see Appendix D-14 and D-16 for the letters and Appendices D-18 to D-21, D-15 and D-17, D-10 to D-13, and Appendix I-20 Import Student List Instructions)
- Send a notification with each school’s NAEP assessment date to the principal or other administrative official (see Appendix D-22)

B.2.b. School Staff Assessment Responsibilities

The responsibilities for school staff are determined by which NAEP Administration Model the school is eligible to be assessed within (i.e., using either school devices or NAEP devices). It is assumed that 80 percent of the sample will be assessed using school devices, and 20 percent of the sample will be assessed using NAEP devices.

The School Coordinator role is essential for both the school device model and the NAEP device model. The coordinator is responsible for preparing for the NAEP assessment in the school using the Assessment Management System (AMS), which is an online secure site that provides participating schools with a convenient way to prepare for the upcoming assessment. The AMS serves as the primary resource and action center throughout the assessment process. Appendix I contains 2027 AMS user views. Several AMS sections have been updated in this 30-day Clearance Package, and the remaining sections will be updated in the Amendment (July 2026).

In addition to the School Coordinator role, an Application Installer may also be identified for school device model schools. This person will assist in deploying the NAEP Assessment Application (i.e., eNAEP) on school devices.

The school may also choose to have a Technology Coordinator who may assist on the day of the assessment with technical tasks, including troubleshooting technology issues. Additionally, depending on the selected assessment grouping option, school staff are to remain in the assessment location to provide support with

classroom management. This individual can be another staff member that the school identifies to assist with classroom management. If the school requests to assess all 50 students at the same time, school staff are required to remain in the assessment location for the duration of the assessment.

The following describes the different activities for School Coordinators, their purpose, and the timeframes for each.

- Receive Initial Communication
 - Tasks: District Superintendent, District Assessment Coordinator, and School Administrators receive initial communication information that schools have been sampled for NAEP; ensure that School Technology Survey is completed; make sure that the registration for the AMS is complete; and determine roles for the assessment.
 - Purpose: Aids in identifying Administration model assignment and school staff support.
 - Timeline for 2027: Late Spring 2026 – Summer 2026
- Deploy NAEP Assessment Application on School Devices
 - Tasks: Identified Application Installer will access the eNAEP Download Center for instructions about how to deploy the NAEP Assessment Application on school devices. They will receive automated communications from the system explaining their role (see Appendix D-8).
 - Purpose: Prepare school devices for the assessment.
 - Timeline for 2027: Summer 2026 – December 2026
- Register and Provide School Information
 - Tasks: School Coordinators will register for the AMS website and provide school contact information and school characteristics, including student enrollment for the selected grade and charter school status.
 - Purpose: Gain access to the secure AMS as the designated School Coordinator and ensure that NAEP has the most up-to-date information about the school.
 - Timeline for 2027: September 2026 – October 2026
- Import Student List/Sample
 - Tasks: NAEP collects a list of all students in the selected grade for each school. The school submits an Excel file with all students and their demographic data (see sample in Appendix I). Note: As described in section A.12, the School Coordinator is only responsible for this task if the State Coordinator has not previously submitted the student list for sampling. As such, only a portion of the School Coordinators are responsible for this task.
 - Purpose: Draw a representative sample of students from the school to participate in the NAEP assessments. Ensure all students have an opportunity to be sampled.
 - Timeline for 2027: October 2026 – November 2026
- Review Student Information Tasks
 - Tasks: Review demographic data to confirm accuracy and add any missing demographic data. School Coordinators will be asked to review and verify student information and to indicate whether students were displaced from a natural disaster.
 - Purpose: Demographic data are used for reporting results of student groups in The Nation’s Report Card.
 - Timeline for 2027: December 2026 – January 2027
- Complete SD/EL Student Information
 - Tasks: Determine how students participate in NAEP (i.e., without accommodations, with accommodations, or do not test). Provide the Individuals with Disabilities Education Act (IDEA) disability status, English proficiency, primary language, grade- or age-level performance, and accommodations (see Appendix I-11).
 - Purpose: Confirm students have appropriate support to access the NAEP assessment.
 - Timeline for 2027: December 2026 – January 2027
- Notify Parents
 - Tasks: Download the parent/guardian notification letters (see Appendix D-10 to D-13) and certify the date and method by which parents/guardians were notified.

- Purpose: Ensure that parents/guardians are notified of their student’s selection to participate in NAEP, which is a requirement of the Reauthorized Elementary and Secondary Education Act (ESEA).⁴
- Timeline for 2027: December 2026 – January 2027
- Manage Questionnaires
 - Tasks: Identify respondents for the school questionnaire and the relevant teacher(s) for each student, send respondents links to online questionnaires, and monitor completion of questionnaires. Distribute information about NAEP to teachers (see Appendix D-33 to D-34).
 - Purpose: Results are used to provide contextual data from schools and teachers in The Nation’s Report Card.
 - Timeline for 2027: December 2026 – January 2027
- Add New Students
 - Tasks: Identify any newly enrolled students since the original list of students was provided.
 - Purpose: Ensure all students have an opportunity to be sampled so NAEP can assess a representative sample of students.
 - Timeline for 2027: January 2027
- Schedule Students and Assessment Logistics
 - Tasks: Determine assessment session times and locations, share cell phone policy to ensure security of NAEP items, and make a plan to encourage student participation.
 - Purpose: Ensure that the school is prepared for a successful administration of NAEP.
 - Timeline for 2027: December 2026 – January 2027
- Complete Technical Logistics (school device model schools only)
 - Tasks: The School Coordinator completes the technical logistics in the AMS, including verifying the application works on student devices.
 - Purpose: Provides necessary information about schools’ devices and internet connections to alert field staff about what technical considerations need to be addressed prior to assessment day.
 - Timeline for 2027: December 2026 – January 2027
- Print Appointment Cards and Teacher Notification Letters
 - Tasks: Print resources to notify students and teachers.
 - Purpose: Ensure students are prepared and arrive on time at the assessment location.
 - Timeline for 2027: One week prior to the scheduled assessment date
- Remove NAEP Assessment Application from Student Devices (school device schools only)
 - Tasks: The NAEP Assessment Application Installer coordinates the uninstall of the NAEP Assessment Application from student Chromebook devices or from Windows devices.
 - Purpose: Maintain security of the assessment.
 - Timeline for 2027: After the scheduled assessment
- Destroy Any Documents with Student Identifying Information
 - Tasks: The School Coordinator destroys any documents with student identifying information.
 - Purpose: Maintain security of the student information.
 - Timeline for 2027: After the scheduled assessment

Before the assessment, the NAEP field representative will host a virtual meeting with the School Coordinator to review the completion of the tasks, answer any questions, and review assessment day procedures.

⁴ Note: Parents/legal guardians are required to receive notification of student participation, but NAEP does not require explicit parental consent (*by law, parents/guardians of students selected to participate in NAEP must be notified in writing of their child’s selection prior to the administration of the assessment*).

As part of the ongoing quality control of the assessment process, schools will be asked to complete an additional follow-up survey. Survey questions solicit feedback on pre-assessment, assessment, and procedural processes. The Assessment Feedback Surveys are included as drafts in Appendix E, and they will be updated in the Amendment (July 2026).

B.2.c. Administration Procedures

Trained NAEP representatives will administer the assessment and provide significant support to schools. Some schools will be assessed on NAEP devices, and some schools will be assessed on school devices. In schools assessed on NAEP devices, NAEP representatives will set up and administer the assessment and bring all necessary equipment and assessment materials to the school, including devices with an attached keyboard, and earbuds. In schools assessed on school devices, an assigned school-staff member will be responsible for identifying school devices (e.g., desktops, laptops, tablets with keyboards) for the assessment and preparing devices in advance of assessment day. For both administration models, NAEP representatives will pack up any NAEP-owned equipment or materials and leave the area as they found it.

The traditional NAEP design assesses each student in 60 minutes for one cognitive subject. The schools will administer assessments, typically in groups of approximately 25 students, with two groups conducted sequentially during the school day, although additional concurrent groups may be required. Schools that are assessed under the school device model may choose to assess all students simultaneously in one or two locations if additional school staff are available to support the assessment and remain in the testing room.

B.3. Methods to Secure Cooperation, Maximize Response Rates, and Deal with Nonresponse

Schools within each state will be selected, and the chief state school officer and the NAEP State Coordinator will be asked to solicit their cooperation. Since the science grade 8 assessment is not mandated under the National Assessment of Educational Progress Authorization Act, school participation rates will be lower than the mandated subjects (i.e., math and reading grades 4 and 8). To increase the participation rate, NCES has created specialized materials to promote participation:

- Videos and additional information on the NAEP website for schools, students, parents, and teachers (see <http://nces.ed.gov/nationsreportcard/about/schools.aspx>)
- Additional brochure and resources targeting private schools, including *NAEP in Your Private School* (see Appendix D-20 and D-21), and a webpage dedicated to private schools (<http://nces.ed.gov/nationsreportcard/about/nonpublicschools.aspx>)

B.3.a. Methods to Maximize Response Rate

There are four main areas that can be focused on to maximize completion rates: (1) early distribution of information and materials; (2) effective communication with school personnel; (3) efforts to encourage student participation; and (4) efforts made by field staff to avoid refusals and to convert initial refusals to cooperating schools.

Early Distribution of Information and Materials

Over the years, feedback from schools and states indicated that notification of a school's selection in the NAEP sample earlier rather than later is beneficial to the school for planning purposes and improves school response rates. NAEP generally notifies schools of selection in May of the year prior to the assessment. In

addition, the School Technology Survey and the eNAEP Download Center will be available at the time of school notification, to provide schools who qualify for the school device model with more information about the NAEP Assessment Application.

Effective Communication with School Staff

The participation of schools can be increased by effectively communicating information about NAEP, including what NAEP measures; the various assessment components; why it is important that schools, students, and teachers participate; and the role of the school staff. Effective communication materials from the State Coordinator and the Field Staff (as described in section B.2.a.) help maximize the participation of schools. In addition, an intuitive and easy-to-use AMS system, School Technology Survey, and eNAEP Download Center (as described in section B.2.b.) help ensure that the School and Technology Coordinators’ experiences are positive.

Encouraging Student Participation

Previous feedback from school administrators has shown that students respond more positively to the assessment when they know the assessment has the support of the school administration. Therefore, the Field Staff will urge the School Coordinators to encourage students to do their best. These efforts include having the principal introduce the assessment. In addition, Field Staff will suggest to the School Coordinator that grade 8 teachers may want to issue community service credits for participating students.

Avoiding Refusals and Converting Initial School Refusals

NAEP representatives will be trained in methods to maximize school participation, which will include being flexible in assessment scheduling, following up with the School Coordinators, and scheduling preparation meetings, at the School Coordinator’s request.

B.3.b. Statistical Approaches to Nonresponse

Not all of the students in the NAEP sample may respond. Some will be unavailable during the sample time period because of absenteeism or other reasons. If a student decides not to participate, that action will be recorded, but no steps will be taken to obtain participation. The NAEP response rates follow the NCES statistical standards, which reference the American Association for Public Opinion Research guidelines. Response rates, in percentages, from the 2022 and 2024 NAEP digitally based assessments (DBAs) are shown below.

	2022	2024
	Grade 8	Grade 8
Student response rates		
Public schools	89	89
Private schools	94	91
School response rates		
Public schools	100	100
Private schools	35	34

Note: The numbers in the table above are rounded.

NAEP is working to increase engagement of private school organization leaders in recruitment efforts and is requesting customized endorsement letters from these organizations (see Appendix D-23). NAEP has also expanded outreach efforts to schools to promote the use of NAEP data tools to highlight the value of NAEP data to private schools. Furthermore, a customized dashboard for private schools is available on The Nation’s

Report Card site: https://www.nationsreportcard.gov/dashboards/schools_dashboard.aspx.

The Governing Board, who sets policy for NAEP, works to appropriately represent students in all assessed jurisdictions and report in a consistent manner. Since 2010 (updated August 2014), the Governing Board has followed the *NAEP Testing and Reporting on Students with Disabilities and English Language Learners* (located at

https://www.nagb.gov/content/nagb/assets/documents/policies/naep_testandreport_studentswithdisabilities.pdf).

The policy's goal is to maximize participation of sampled students in NAEP to

- reduce variation in exclusion rates for SDs and ELs across states and districts;
- develop uniform national guidelines for NAEP; and
- optimize representation of SDs and ELs in the NAEP assessment.

B.4. Pilot Testing and Data Uses

Pilot testing of cognitive and non-cognitive items is carried out in all subject areas. The purpose of pilot testing is to obtain information regarding clarity, difficulty levels, timing, and feasibility of items and conditions. In addition to ensuring that items measure what is intended, the data collected from pilot tests serve as the basis for selecting the most effective items and data collection procedures for the subsequent operational assessments. Pilot testing is a cost-effective means for revising and selecting items prior to an operational data collection because the items are administered to a small, nationally representative sample of students and data are gathered about performance that crosses the spectrum of student achievement. Items that do not work well can be dropped or modified before the operational administration.

Prior to pilot testing, many new items are pre-tested with small groups of sample participants (cleared under the NCES pretesting generic clearance agreement; OMB# 1850-0803). All non-cognitive items undergo one-on-one cognitive interviews, which is useful for identifying questionnaire and procedural problems before larger-scale pilot testing is undertaken. Select cognitive items also undergo pre-pilot testing, such as item tryouts or cognitive interviews, to test out new item types, new formats, or challenging content. In addition, usability testing is conducted on new technologies and technology-based platforms and instruments.

NAEP will administer the assessment using school devices and school internet, when possible. For schools that cannot meet the eligibility requirements for use of school devices, NAEP will provide an alternate delivery model utilizing NAEP Chromebooks. NAEP has transitioned to primarily administer on school devices with a staged approach so that trends can be measured across time.

NAEP conducted a School-based Equipment study in 2024 (OMB# 1850-0803 v.347) as well as a Field Test in 2025 (OMB# 1850-0803 v.353) to provide more information about (1) student and school interactions with the eNAEP system on school devices as compared to NAEP Chromebooks and Surface Pros and (2) the use of school devices in operational NAEP assessments beginning in 2026. Also, in 2026 a bridge study will compare NAEP devices and school devices to evaluate whether scores from the two different assessment models are comparable. This study will compare the two different types of schools (i.e., those qualified to assess on school devices and those not qualified to assess on school devices), because they may have different characteristics. As a result, some schools that qualify to be assessed on school devices will be assessed on NAEP devices. This will establish a common linking population.

B.5. Consultants on NAEP Design

NCES, ETS, and Westat staff have collaborated on aspects of the NAEP design. The primary persons responsible are as follows:

- From NCES: Gina Ruehl and Enis Dogan

- From ETS: Amy Dresher, Peter Ciemins, Robert Finnegan, Yue Jia, and Ranu Palta-Upreti
- From Westat: Tom Krenzke, Lloyd Hicks, Lisa Rodriguez, and Marcie Hickman

In addition, the NAEP Design and Analysis Committee (see Appendix A-1) has also contributed to NAEP designs on an ongoing basis.